

EXHIBIT 27

UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

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IN RE: WELLS FARGO :

MORTGAGE :

DISCRIMINATION : Civil Action No.

LITIGATION. : 3:22-cv-00990-JD

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Tuesday, April 9, 2024

Washington, D.C.

Videotaped Deposition of:

AMANDA KURZENDOERFER, Ph.D.,

called for oral examination by counsel for Wells
Fargo, pursuant to notice, at the law offices of
McGuire Woods, LLP, 888 16th Street, Northwest, Suite
500, Washington, D.C. 20036, before Christina S.
Hotsko, RPR, CRR, of Veritext Legal Solutions, a
Notary Public in and for the District of Columbia,
beginning at 10:06 a.m., when were present on behalf
of the respective parties:

1 opinion about?

2 MR. BLISS: Objection to form.

3 BY MS. LIAS-BOOKER:

4 Q. Do you want me to repeat the --

5 A. I took an approach that aligns with the 10:47:05

6 literature. I took a more -- a different approach

7 in the rebuttal report by looking at the rate

8 sheets, and I found larger differences.

9 Q. And then you completed your analysis in
10 your affirmative report after it was criticized by 10:47:18
11 Dr. Courchane, and you actually looked at the rate
12 sheets; is that correct?

13 A. She hadn't seen my --

14 MR. BLISS: Objection. Mischaracterizes
15 the record. 10:47:31

16 THE WITNESS: Could you please repeat the
17 question?

18 BY MS. LIAS-BOOKER:

19 Q. Why did you look at the rate sheets in
20 forming your rebuttal analysis? 10:47:35

21 A. Dr. Courchane discussed rate sheets and
22 discussed specifically that they were used at

1 Wells Fargo. I knew of the rate sheets and I now
2 had the opportunity to look at the rate sheets.

3 Q. You had an opportunity to look at them in
4 doing your affirmative report, too, correct, but
5 you chose not to, right? 10:47:53

6 A. There were 1500 rate sheets and there is
7 a methodology accepted in academia, and I limited
8 to the set of loans that were salable to GSEs.

9 Q. So you chose not to look at 1500 rate
10 sheets because there were too many of them? 10:48:07

11 A. It was a big exercise. As far as I know,
12 Dr. Courchane hasn't done this either.

13 Q. She's not rendering an opinion on
14 interest rates in this case. You are.

15 So you chose not to look at the 1500 10:48:21
16 because there were too many?

17 A. There were -- there was a reasonable
18 alternative to doing so, and so that's what I
19 used.

20 MS. LIAS-BOOKER: Let's take a small 10:49:00
21 break.

22 MR. BLISS: Okay.

1 MS. LIAS-BOOKER: Five minutes?

2 MR. BLISS: Okay. How small is small?

3 MS. LIAS-BOOKER: Five minutes or less.

4 MR. BLISS: Okay.

5 VIDEO TECHNICIAN: The time is 10:48 a.m. 10:49:09

6 We are going off the record.

7 (A recess was taken.)

8 VIDEO TECHNICIAN: The time is 10:57 a.m.

9 We're going back on the record.

10 Please proceed, Counsel. 10:58:57

11 MS. LIAS-BOOKER: Thank you.

12 BY MS. LIAS-BOOKER:

13 Q. Dr. Kurzendoerfer, if you can turn to the
14 discussion of what you call Wells Fargo internal

15 AUS outcomes in paragraph 46 of your affirmative 10:59:10
16 report, please.

17 A. I'm there.

18 Q. Okay. Now, when you refer to internal

19 AUS outcomes, are you referring to credit risk

20 class and credit grade that you say are assigned 10:59:29

21 by Wells Fargo's ECS models?

22 A. Yes, that's correct.

1 Q. And in figure 9, you present the approval
2 rates for various credit risk classes; is that
3 correct?

4 A. Yes. For conventional home mortgage.

5 Q. Thank you. 10:59:53

6 And all of your approval rates are over
7 35 percent; is that right?

8 A. Yes.

9 Q. And the only ones below 50 percent are
10 C2, inaccurate credit, and no result; is that 11:00:09
11 correct?

12 A. Yes.

13 Q. And do you understand what C2 stands for?

14 A. C is caution, as I understand. Same for
15 C1. And C2 is a higher-risk credit caution 11:00:22
16 designation.

17 Q. And the same questions go for the
18 approval rates by credit risk class and race and
19 ethnicity that you show in figure 11 as well,
20 correct? 11:00:40

21 A. Yes.

22 Q. And if I am correct, you're not opining

1 that the ECS credit risk classes are automatic
2 approvals or automatic denials, right?

3 A. Correct.

4 Q. Something else has to go into the
5 approval or denial of a loan application other 11:01:01
6 than the ECS credit risk class, correct?

7 A. Correct. The ECS credit risk class is an
8 input. Yes.

9 Q. Thank you.

10 Now, in figure 10 -- you say that it 11:01:18
11 shows the proportion of applicants of each race
12 and ethnicity that fall into each credit risk
13 class for conventional mortgages, right?

14 A. Correct.

15 Q. And figure 10 is not the result of any 11:01:32
16 sort of regression analysis, correct?

17 A. Figure 10 is just a portrayal of the raw
18 data. It's a distribution.

19 Q. It does not control for any applicant's
20 credit characteristics, correct? 11:01:50

21 A. No, it doesn't. But that wasn't the
22 purpose of this analysis.

1 Q. Understood. But it's just a count,
2 right, of how many applicants fall into which
3 credit risk class expressed as a percentage of the
4 whole, right?

5 A. Yes, that's correct. 11:02:03

6 Q. And figure 10 does not express the
7 proportion of similarly situated applicants that
8 fall into each credit risk class, correct?

9 A. Could you explain what you mean by
10 similarly situated? 11:02:18

11 Q. Do you understand the term "similarly
12 situated"?

13 A. I -- yes, general. Just to be sure we're
14 on the same page.

15 Q. What do you -- 11:02:25

16 A. I understand you mean similar credit
17 characteristics, similar loan characteristics.
18 That was just to clarify.

19 But the answer is no.

20 Q. Okay. And figure 14 is also just the 11:02:34
21 proportion of how many applicants of each race and
22 ethnicity fall into each credit risk class for

1 non-conventional mortgages, right?

2 A. Yes.

3 Q. And figure 14 is, likewise, not based on
4 any sort of regression analysis, correct?

5 A. That's correct. 11:02:55

6 Q. And figure 14 does not express the
7 proportion of similarly situated applicants that
8 fall into each credit risk class, correct?

9 A. That's correct.

10 Q. And indeed, nowhere in your affirmative 11:03:05
11 report do you express an opinion on the proportion
12 of similarly situated applicants that fall into
13 each credit risk class; isn't that right?

14 A. I'm not sure how I would have done that,
15 so my -- 11:03:24

16 Q. So is that a no to my question?

17 A. I think I should clarify. So my
18 understanding --

19 Q. Well, you first need to answer my
20 question, which is, did you do it? Did you do a 11:03:32
21 similarly situated analysis?

22 A. I did not do a similarly situated

1 analysis --

2 Q. Okay.

3 A. -- of ECS as they fall into the
4 categories. But my understanding of the model is
5 that it takes into consideration certain credit 11:03:43
6 factors of the applicant and then in -- by doing
7 -- by doing that, it would assign a score and a
8 risk class.

9 So by that procedure, the white, black,
10 Hispanic, Asian, et cetera, applicants who are in 11:03:59
11 a given credit risk class should be similarly
12 situated by the ECS model.

13 Q. Is it your testimony that ECS provides a
14 similarly situated analysis of loan applicants?

15 MR. BLISS: Objection. Vague. 11:04:15

16 BY MS. LIAS-BOOKER:

17 Q. Let me repeat it.

18 Is it your testimony that ECS provides a
19 similarly situated analysis of loan applicants?

20 A. ECS model is looking at certain 11:04:28
21 credit-related factors, and it's going to make an
22 assignment based on those factors. It's going to

1 give a score and assign to a certain class.

2 And so, based on those input factors, it
3 stands to reason that people in the same class
4 would have similar factors, which --

5 Q. But -- 11:04:49

6 A. -- is why --

7 Q. I'm sorry. Go ahead.

8 A. Which is why, as I show in figure 11, the
9 approval rates within a given category by race and
10 show that, even conditional on being a C1 or C2, 11:05:09
11 white approval rates are higher than minority
12 approval rates.

13 Q. That's not my question. My question is,
14 I think, more simple than that.

15 ECS doesn't do similarly situated 11:05:18
16 analysis; isn't that correct?

17 A. ECS --

18 MR. BLISS: Objection. Vague.

19 THE WITNESS: ECS is a scoring model.

20 BY MS. LIAS-BOOKER: 11:05:29

21 Q. Thank you.

22 Now, figures 16 through 18 provide

1 information about home equity credit grade in
2 terms of approval rates and distribution by race
3 and ethnicity; is that right?

4 A. Yes.

5 Q. And again, those figures, 16 through 18, 11:05:40
6 do not express an opinion on the proportion of
7 similarly situated applicants that fall into each
8 home equity credit grade, correct?

9 A. I think you're asking --

10 MR. BLISS: Objection to form. 11:05:56

11 THE WITNESS: There's no regression
12 analysis underlying this. It's just reporting the
13 proportion of applicants that fall within each
14 class by race and then reporting outcomes for
15 applicants by race within those categories. 11:06:11

16 BY MS. LIAS-BOOKER:

17 Q. And so the answer to my question that
18 figures 16 through 18 do not express an opinion on
19 the proportion of similarly situated applicants
20 that fall into each home equity credit grade is -- 11:06:22
21 that's correct?

22 MR. BLISS: Objection to form.

1 THE WITNESS: I haven't controlled for
2 any factors, any factors that would align -- align
3 applicants here because that was not the purpose
4 of this analysis.

5 BY MS. LIAS-BOOKER: 11:06:44

6 Q. Okay. So you didn't do a similarly
7 situated analysis, correct?

8 MR. BLISS: Objection to form.

9 THE WITNESS: As I previously stated, I
10 don't know what the purpose of that would be 11:07:00
11 because ECS is a scoring model that already
12 incorporates factors of the applicants.

13 BY MS. LIAS-BOOKER:

14 Q. So, no, you did not do a similarly
15 situated analysis, correct? 11:07:09

16 A. I did not do a regression analysis here.

17 Q. Or a similarly situated analysis either,
18 correct?

19 MR. BLISS: Objection to form. Vague.

20 BY MS. LIAS-BOOKER: 11:07:26

21 Q. And in fact -- let me add to that -- you
22 don't express an opinion anywhere in the report

1 Q. Okay. And if someone applies for a
2 government loan, whether or not these government
3 agencies actually will insure the loans is going
4 to be very important when it comes to
5 underwriting. 14:01:25

6 Do you agree with that?

7 MR. BLISS: Objection. Lack of
8 foundation.

9 THE WITNESS: I did not consider
10 salability or insurability of the loans in this 14:01:36
11 analysis.

12 BY MS. LIAS-BOOKER:

13 Q. So to follow up on something -- so your
14 regression analysis, then, does not control for
15 whether an agency loan application is actually 14:01:45
16 eligible to be sold to Fannie Mae or Freddie Mac,
17 correct?

18 A. It controls for an approve recommendation
19 but not -- does not distinguish between eligible
20 or ineligible. 14:02:01

21 Q. And your regression analysis does not
22 control for whether a government loan application

1 analysis that minority applicants are more likely
2 to be assigned to a lower credit risk class, and,
3 conditional on that, are likely to have lower
4 approval rates.

5 So that is a policy that I've analyzed. 14:48:00

6 I've analyzed overlays in my rebuttal report.

7 Those two things are separate and distinct from

8 the regression analysis, which is simply to

9 attribute -- which is to look at key underwriting

10 factors and to understand whether they can explain 14:48:15

11 the disparities in approval rates, and they can't.

12 BY MS. LIAS-BOOKER:

13 Q. So your regression analysis is not tied

14 to a particular Wells Fargo policy; isn't that

15 correct? 14:48:27

16 A. Correct.

17 MR. BLISS: Objection to form. Vague.

18 BY MS. LIAS-BOOKER:

19 Q. You mentioned several times today about

20 the C1/C2 policy. And in footnote 92 in your 14:49:46

21 report you noted the existence of two policy --

22 oh, sorry.

1 Q. Right. Because there's limitations to
2 every model, correct?

3 A. Correct.

4 Q. No model is perfect.

5 A. Correct. 15:23:45

6 Q. Okay. And your models don't take into
7 account problems in verifying income, correct?

8 A. Correct.

9 Q. They don't take into account problems
10 with clouded title, correct? 15:23:57

11 A. Correct.

12 Q. And your models don't take into account
13 whether an external AUS said an application was
14 ineligible for the program applied for, correct?

15 A. Correct. 15:24:13

16 MR. BLISS: Objection. Asked and
17 answered.

18 BY MS. LIAS-BOOKER:

19 Q. Now, if you can please turn to table --
20 let's go to table A5.1 of Dr. Courchane's rebuttal 15:24:26
21 report, which I'm going to hand you in a moment.
22

1 in your report yield a predicted probability of
2 approval for each application based on the factors
3 controlled for by that model, correct?

4 A. Correct.

5 Q. Did you limit inclusion in your list of 16:40:02
6 proposed class members to applications that your
7 models predicted had a better than 50 percent
8 probability of approval?

9 A. No.

10 Q. So your list of proposed class members 16:40:15
11 includes applications that your own models predict
12 would -- likely would have been denied, regardless
13 of race, correct?

14 MR. BLISS: Objection to form.

15 THE WITNESS: That's not the purpose of 16:40:28
16 the model. It's not -- the purpose of the model
17 is not to predict. It's to identify marginal
18 effects for race.

19 BY MS. LIAS-BOOKER:

20 Q. But my question to you that I need an 16:40:41
21 answer to is, your list of proposed class members
22 includes applications that your own models predict

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1 would likely have been denied, regardless of their
2 race, correct?

3 MR. BLISS: Objection to form -- form.

4 THE WITNESS: Yes. And --

5 MR. BLISS: Mischaracterizes -- sorry, go 16:41:05
6 ahead.

7 THE WITNESS: Yes. And the reason that I
8 did that is because it's not a predictive model.

9 BY MS. LIAS-BOOKER:

10 Q. But the logic [sic] regression report you 16:41:18
11 did yielded a predicted probability of approval
12 for each application, correct?

13 A. It does.

14 Q. Okay. Please turn to table A7.2 of
15 Dr. Courchane's rebuttal report. And looking 16:41:33
16 at -- I think it's at page 73.

17 Do you see the predicted probabilities of
18 approval for named plaintiff Bryan Brown?

19 A. I do.

20 Q. Okay. And depending on whether the 16:42:06
21 number is based on figure 24 or figure 34 of your
22 report, Dr. Courchane says that the probability of

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1 approval predicted by your model is either

2 1.1 percent or 1.5 percent, correct?

3 A. That's what Dr. Courchane says. Yes.

4 Q. Do you have any reason to doubt that the

5 numbers reflected in Dr. Courchane's report about 16:42:24

6 your model's prediction are inaccurate?

7 A. I do not.

8 Q. Is Mr. Brown included in your list of

9 proposed class members?

10 A. I believe so. Yes. 16:42:52

11 Q. Does your report disclose how many of the

12 119,000 proposed class members had less than a

13 50 percent probability of approval, according to

14 your models?

15 A. No. 16:43:04

16 Q. Is it listed anywhere in your work

17 papers?

18 A. You could get that from the backup

19 production, from my affirmative report.

20 MS. LIAS-BOOKER: And has that been 16:43:25

21 produced?

22 THE WITNESS: Yes.

1 MR. BLISS: Yes.

2 MS. LIAS-BOOKER: Thank you.

3 BY MS. LIAS-BOOKER:

4 Q. In figure 34 of your affirmative report,
5 you list the marginal effects for the proposed 16:43:31
6 class based on your HMDA and Wells Fargo controls
7 model, correct?

8 A. Yes.

9 Q. So for example, the marginal effect for
10 black applicants for a refinance application is 16:43:45
11 4.2 percent; is that right?

12 A. Yes.

13 Q. Does that mean that, on average, the
14 predicted probability of approval for a black
15 application is 4.2 percent less than the predicted 16:43:58
16 probability of approval for that application had
17 he been white?

18 A. That's the correct interpretation.

19 Q. Overall, does the 4.2 percent reported in
20 figure 34 mean that, after controlling for the 16:44:14
21 underwriting variables in your model, the approval
22 rate for black applications is 4.2 percent lower

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1 than it would have been had they been white
2 applications?

3 MR. BLISS: Objection to form.

4 THE WITNESS: In aggregate, yes.

5 BY MS. LIAS-BOOKER: 16:44:38

6 Q. Based on the marginal effects you report
7 in figure 34, are you able to say what percent of
8 the black refinance applications in your proposed
9 class would have been approved if they had been
10 white, according to your model? 16:44:50

11 A. No.

12 Q. Can you say confidently that at least
13 half of the proposed class would have been
14 approved had they been white based on these
15 marginal effects? 16:45:05

16 A. I can't say --

17 MR. BLISS: Objection to form.

18 BY MS. LIAS-BOOKER:

19 Q. Can you say that as to at least
20 25 percent? 16:45:11

21 MR. BLISS: Objection to form.

22 THE WITNESS: I cannot quantify that.

1 BY MS. LIAS-BOOKER:

2 Q. How about at least as to 15 percent?

3 MR. BLISS: Objection to form.

4 THE WITNESS: I don't think you can

5 answer that question. You would have to make 16:45:32

6 assumptions about at what probability should a

7 minority applicant have been approved.

8 BY MS. LIAS-BOOKER:

9 Q. So you can't tell us today whether at
10 least 15 percent would have been approved? 16:45:43

11 MR. BLISS: Objection to form.

12 BY MS. LIAS-BOOKER:

13 Q. Is that your testimony?

14 A. If we were to make certain assumptions
15 about what thresholds would -- should constitute 16:45:52
16 an approval, then I could do that calculation.

17 Q. But you have not done that, correct?

18 A. Correct.

19 Q. Does your report identify which proposed
20 class members would have been approved if they had 16:46:03
21 been white?

22 MR. BLISS: Objection to form.

1 THE WITNESS: For the same -- same answer
2 as before.

3 BY MS. LIAS-BOOKER:

4 Q. No?

5 A. No. 16:46:17

6 Q. Okay. And I presume it's also no that
7 your report does not say how to identify which
8 proposed class members would have been approved if
9 they had been white.

10 A. Under -- 16:46:35

11 MR. BLISS: Objection to form.

12 THE WITNESS: Under certain assumptions,
13 you could do that. If you set a probability
14 threshold and that was the assumption at which the
15 applicant should have been approved, then yes, 16:46:44
16 that's quantifiable.

17 BY MS. LIAS-BOOKER:

18 Q. But you did not do that analysis,
19 correct?

20 A. Correct. 16:46:50

21 MS. LIAS-BOOKER: Let's take a break.

22 VIDEO TECHNICIAN: The time is 4:46 p.m.

CERTIFICATE OF NOTARY PUBLIC

I, CHRISTINA S. HOTSKO, the officer before whom the foregoing deposition was taken, do hereby certify that the witness whose testimony appears in the foregoing deposition was duly sworn by me; that the testimony of said witness was taken by me in stenotypy and thereafter reduced to typewriting under my direction; that said statement is a true record of the proceedings; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this statement was taken; and, further, that I am not a relative or employee of any counsel or attorney employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

Dated: 4/12/2024

A handwritten signature in black ink, appearing to read 'CHS', with a long horizontal flourish extending to the right.

CHRISTINA S. HOTSKO

Notary Public in and for the
District of Columbia

My commission expires:

1 January 2027